

Liquid Enzyme Boost

SAFETY DATA SHEET

Preparation Date: 01-Aug-2008

Revision Date: 04-Apr-2019

Revision Number: 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Liquid Enzyme Boost

Other means of identification

Item#: 1937

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Enzyme-based additive for removal of proteinaceous soils from membrane filtration units, Restricted to professional users

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Cleaning Solutions
11100 N. Congress Ave.
Kansas City, MO 64153
Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Respiratory Sensitization	Category 1

Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled



Appearance Light yellow

Physical state Liquid

Odor No information available

NFPA

Health hazards 1

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin and the eyes.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials

strong oxidizing agents, strong acids, strong bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Subtilisins (proteolytic enzymes) 9014-01-1	Ceiling: 0.00006 mg/m ³	STEL: 0.00006 mg/m ³	-

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection

Goggles.

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Appearance

Liquid
Light yellow

Odor
Odor Threshold

No information available
No information available

Property

Values

Remarks/ Method

pH

5

Melting point/freezing point

No information available

Boiling Point/Range

No information available

Flash Point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	1.03
Water Solubility	soluble
Partition coefficient: n-octanol/water	No information available
Autoignition Temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	No information available
Dynamic viscosity	No information available

Other information

Liquid Density 8.6 lb/gal

10. STABILITY AND REACTIVITY

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

strong oxidizing agents, strong acids, strong bases

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure Eye contact, Skin contact, Ingestion, Inhalation

Information on likely routes of exposure

Eyes	Contact with eyes may cause irritation.
Skin	May cause skin irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation	Repeated contact may cause allergic reactions in very susceptible persons. Avoid breathing vapors or mists.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	Product is not identified as a sensitizer according to OSHA regulations.
Mutagenic effects	Product is not identified as a mutagen according to OSHA regulations.
Carcinogenicity	Product is not identified as a carcinogen according to OSHA regulations.

Reproductive Effects Product is not identified as having reproductive effects according to OSHA regulations.

STOT - single exposure	Product is not identified as having single target organ toxicity (single exposure) according to OSHA regulations.
STOT - repeated exposure	Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.
Aspiration Hazard	Product is not identified as an aspiration hazard according to OSHA regulations.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Subtilisins (proteolytic enzymes) 9014-01-1	= 3700 mg/kg (Rat)	> 2 ml/kg (rabbit)	No data available

0% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Subtilisins (proteolytic enzymes) 9014-01-1	No data available	LC50 = 16 mg/l	No data available	No data available

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

State Regulations

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date: 01-Aug-2008

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Revision Note: None

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS